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Full Scale Cavitation Observation

Some methods used by Lloyd's Register

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Full Scale Cavitation Observation

Methods of Viewing

- Video recording under stroboscopic lighting.
- Video recording under natural lighting.
- Boroscope observation under natural lighting.

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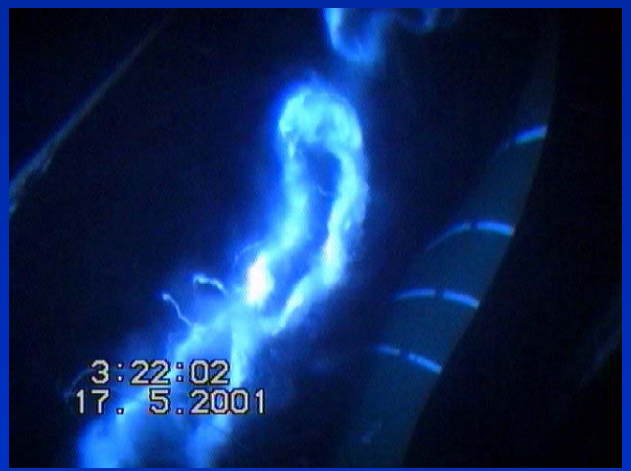
INTERACTING LEADING EDGE AND TIP VORTICES ON A CRUISE SHIP PROPELLER



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Full Scale Cavitation Observation

Single Screw LNG Ship

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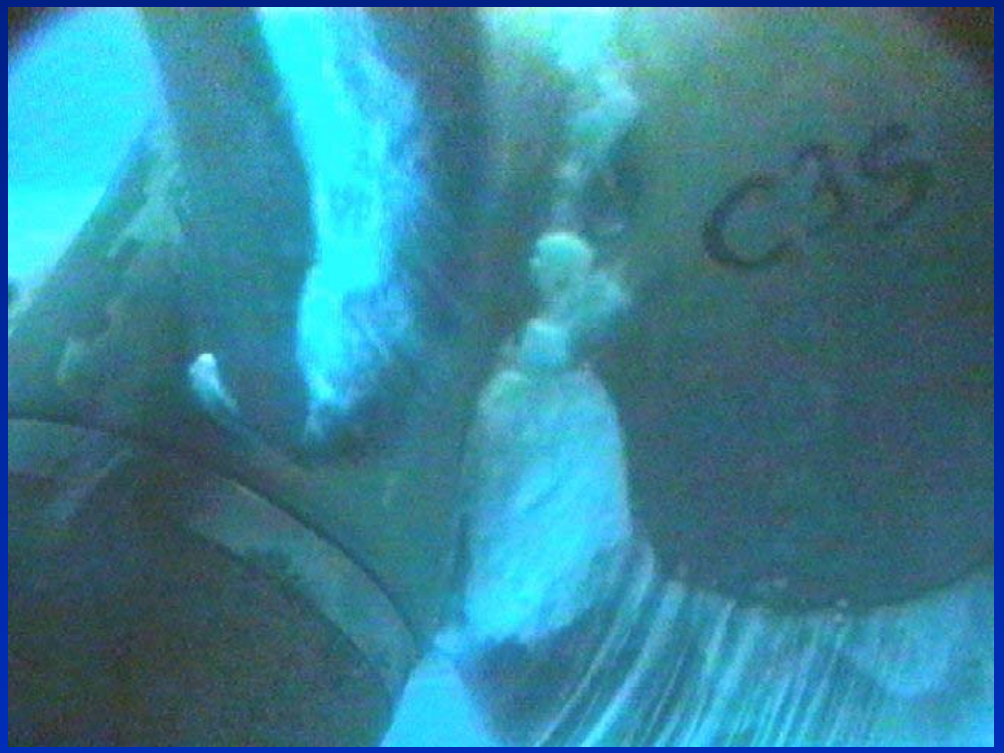
Full Scale Cavitation Observation



High Speed Craft

Full Scale Cavitation Observation

- **Video recording through standard windows in the hull generally gives the best clarity of observation. This usually demands dry docking the ship and is costly to implement.**
- **For many applications all that is needed is a general understanding of the cavitation interactions in the flow field.**
- **For this type of work LR developed the boroscope method of observation:**
  - Cheap to install.
  - 360 degree viewing field.
  - Minimal disturbance to the flow field.

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Hub and Tip Vortices on a Ro/Ro Ship in Poor Visibility Conditions

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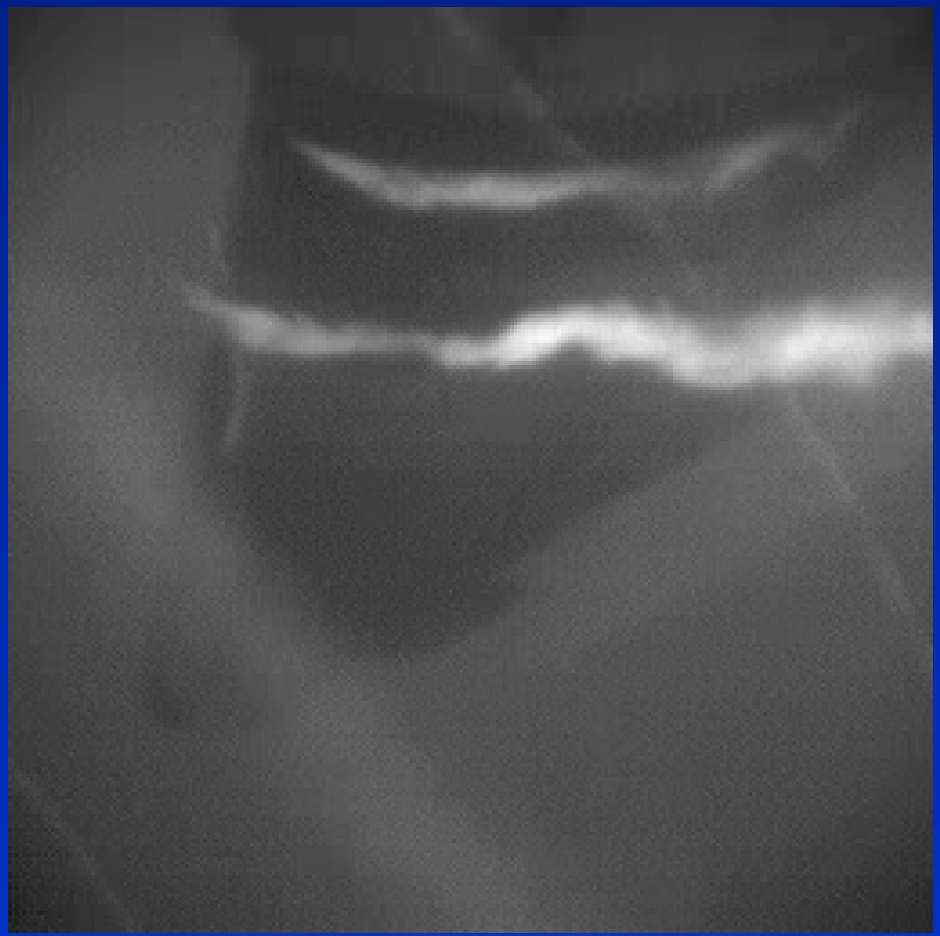
Full Scale Cavitation Observation

Cavitation around a Rudder



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